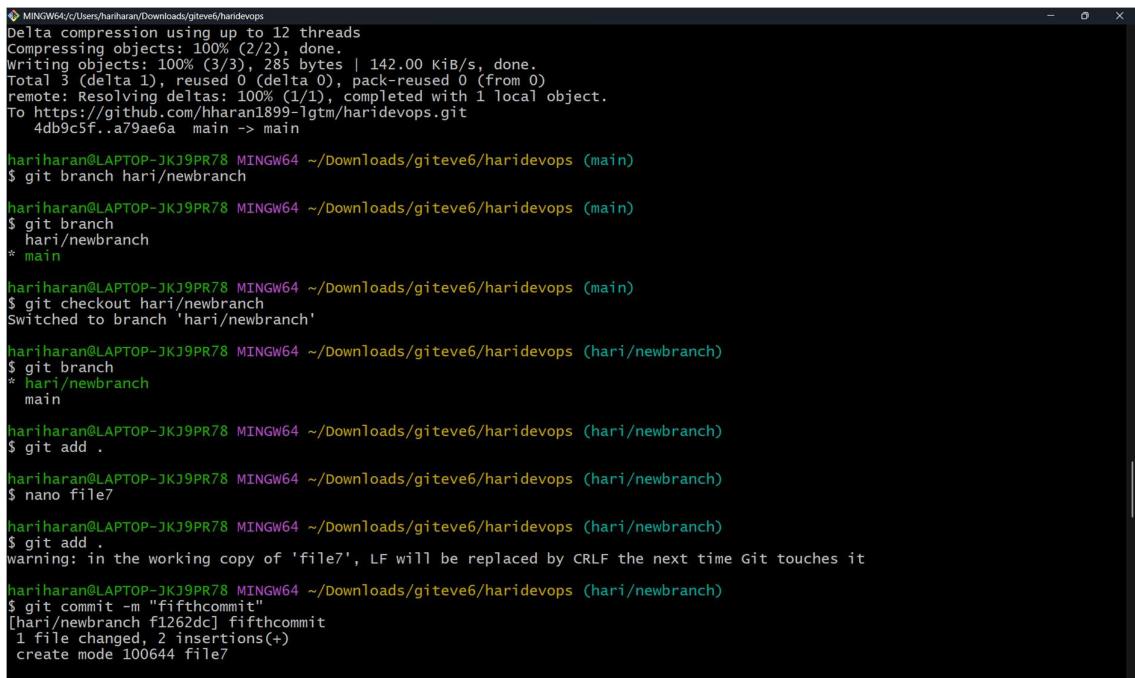


# GIT BRANCHES , GIT REMOTE , GIT PULL , GIT MERGE , GIT REBASE

## GIT BRANCHES

- Using “git branch <name>” command to create an new branch “git branch” command to check branch status “git checkout <branchname>” command to switch branch.



```
MINGW64/c/Users/hariharan/Downloads/giteve6/haridevops
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 285 bytes | 142.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/hariharan1899-lgtm/haridevops.git
  4db9c5f..a79ae6a main -> main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git branch hari/newbranch

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git branch
  hari/newbranch
* main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (main)
$ git checkout hari/newbranch
Switched to branch 'hari/newbranch'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git branch
* hari/newbranch
  main

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git add .

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ nano file7

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git add .
warning: in the working copy of 'file7', LF will be replaced by CRLF the next time Git touches it

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/Downloads/giteve6/haridevops (hari/newbranch)
$ git commit -m "fifthcommit"
[hari/newbranch f1262dc] fifthcommit
 1 file changed, 2 insertions(+)
 create mode 100644 file7
```

## GIT REMOTE

- Using “git remote -v” command to check repository connect with their local repository to be fetch and push it.

```

MINGW64/c/Users/hariharan/downloads/haridevops
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~
$ cd downloads
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads
$ mkdir giteve6
mkdir: cannot create directory 'giteve6': File exists
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads
$ cd haridevops/
bash: cd: haridevops/: No such file or directory
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads
$ git clone https://github.com/hharan1899-lgtm/haridevops.git
Cloning into 'haridevops'...
remote: Enumerating objects: 39, done.
remote: Counting objects: 100% (39/39), done.
remote: Compressing objects: 100% (21/21), done.
remote: Total 39 (delta 11), reused 27 (delta 4), pack-reused 0 (from 0)
Receiving objects: 100% (39/39), 4.16 KiB | 157.00 KiB/s, done.
Resolving deltas: 100% (11/11), done.
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads/haridevops
$ cd haridevops/
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads/haridevops (main)
$ git remote -v
origin https://github.com/hharan1899-lgtm/haridevops.git (fetch)
origin https://github.com/hharan1899-lgtm/haridevops.git (push)
hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/downloads/haridevops (main)
$ |

```

## GIT PULL

- Using “git pull origin <branchname>” command to pull remote repository to local repository.

```

MINGW64/c/Users/HARI/downloads/gitrev/todayeve
HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git commit -m "second try"
> ^C

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git commit -m "second try"
[feature1 6139823] second try
 1 file changed, 1 insertion(+)
   create mode 100644 index.py

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git push origin feature1
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 290.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Hari-haran1788/todayeve.git
  0d5e42e..6139823  feature1 -> feature1

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git pull origin feature2
From https://github.com/Hari-haran1788/todayeve
 * branch      feature2    -> FETCH_HEAD
Already up to date.

HARI@LAPTOP-60HJK66L MINGW64 ~/downloads/gitrev/todayeve (feature1)
$ git switch feature2

```

## GIT MERGE

- Using “git checkout feature1” command to switch the branch “git merge feature” command to merge an two branch.

```
MINGW64/c/Users/hariharan/giteve6/haridevops
$ git commit -m "fourthcommit"
[feature 4aa61ad] fourthcommit
 1 file changed, 1 insertion(+)
 create mode 100644 file12

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git push origin feature
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 272 bytes | 136.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/hharan1899/Igtm/haridevops.git
 71ba3db..4aa61ad feature -> feature

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git log --oneline
4aa61ad (HEAD -> feature, origin/feature) fourthcommit
71ba3db thirdcommit
0e278b7 secondcommit
f815beb firstcommit
401656a (origin/subbranch, origin/main, origin/HEAD, subbranch, main, feature1) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa seconcommit
015e4ec firstcommit
2221d3c Initial commit

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature)
$ git checkout feature1
Switched to branch 'feature1'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
401656a (HEAD -> feature1, origin/subbranch, origin/main, origin/HEAD, subbranch, main) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit

MINGW64/c/Users/hariharan/giteve6/haridevops
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa seconcommit
015e4ec firstcommit
2221d3c Initial commit

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git checkout feature1
Switched to branch 'feature1'

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
401656a (HEAD -> feature1, origin/subbranch, origin/main, origin/HEAD, subbranch, main) sixcommit
568be7e Create hello.py
a79ae6a fifthcommit
4db9c5f fourthcommit
cd6293f thirdcommit
b5588aa seconcommit
015e4ec firstcommit
2221d3c Initial commit

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git merge feature
Updating 401656a..4aa61ad
Fast-forward
 file10 | 1 +
 file11 | 1 +
 file12 | 1 +
 file9  | 1 +
 4 files changed, 4 insertions(+)
 create mode 100644 file10
 create mode 100644 file11
 create mode 100644 file12
 create mode 100644 file9

hariharan@LAPTOP-JKJ9PR78 MINGW64 ~/giteve6/haridevops (feature1)
$ git log --oneline
4aa61ad (HEAD -> feature1, origin/feature, feature) fourthcommit
71ba3db thirdcommit
0e278b7 secondcommit
f815beb firstcommit
```

The image contains two side-by-side screenshots of GitHub repository pages.

**Top Screenshot (feature1 Repository):**

- Branch:** feature1
- Commits:** 12 Commits (fourthcommit to hello.py)
- Activity:** 4 commits ahead of main
- Files:** README.md, file.txt, file10, file11, file12, file2, file3, file4, file5, file6, file9, hello.py
- Contributors:** hharan1899-lgtm (fourthcommit)
- Releases:** No releases published. Create a new release.
- Packages:** No packages published. Publish your first package.
- Languages:** Python 100.0%
- Suggested Workflows:** Python application, Pylint, Publish Python.

**Bottom Screenshot (haridevops Repository):**

- Branch:** feature1
- Commits:** 12 Commits (fourthcommit to hello.py)
- Activity:** 4 commits ahead of main
- Files:** README.md, file.txt, file10, file11, file12, file2, file3, file4, file5, file6, file9, hello.py
- Contributors:** hharan1899-lgtm (fourthcommit)
- Releases:** No releases published. Create a new release.
- Packages:** No packages published. Publish your first package.
- Languages:** Python 100.0%
- Suggested Workflows:** Python application, Pylint, Publish Python.

## GIT REBASE

- Using “git rebase feature3” command to rewrite their commit history.

```
RAHUL - LOQ@RAHUL_LOQ MINGW64 ~/github/devops1 (feature1)
$ git rebase feature3
Current branch feature1 is up to date.
```